

Friday May 18 7:30pm
Our Saviors Lutheran Church
1035 Carol Lane Lafayette
DX Interest Group Meeting
With Dave Piersall, N6ORB 6pm
*** License Testing 6pm ***

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**Affiliated
Club**

MAY MEETING



Convolutional Encoding and WSPR: The New QRP

By Jamie Taylor, KK6OLF

Digital modes such as WSPR allow machine to machine communication over thousands of kilometers using extremely little power (often a watt or less.) Though these signals are frequently buried in the noise floor, digital signal processing allows them to be perfectly decoded.

Software Defined Radios such as HackRF and open source tools like GNU Radio and IPython allow Amateurs to build customized transmitters and receivers, allowing them to experiment and explore these highly efficient protocols.

This talk will demonstrate how these tools can be used to learn more about Amateur modulation techniques, and why the class of protocols which includes WSPR, in particular, is so robust.



Michael Axiak, N6AXQ
Clay Pace, WA6FDF
Jeffrey Skerker, KM6LFY
Kristen Taylor, W6KMT
Syd Ward (no callsign yet)
Jenny Ward, KA6JEN

If you hear any of these new members on the air,
please welcome them to our club.

— *Tom Deeble, KA6SIP*



**When you purchase at Amazon dot com
smile, a portion of your purchase is do-
nated to our club.**

Go to:
<https://smile.amazon.com/ch/23-7072059>

ALL MEMBERS ARE INVITED TO JOIN
THE CLUB E-MAIL GROUP.
DOWNLOAD FILES, INCLUDING *THE*
CARRIER IN **FULL COLOR** AS WELL AS
SHARE INFORMATION WITH THE
MEMBERSHIP AT:

<https://groups.io/g/MDARC>

(the old Yahoo group will be abolished)

Mount Diablo Amateur Radio Club W6CX
P.O. Box 23222 Pleasant Hill, CA 94523
(925) 288-1730

The Carrier is a monthly publication of the Mount Diablo Amateur Radio Club (MDARC). It is the policy of the editor to publish all material submitted by the membership provided such material is in good taste, relevant to amateur radio and of interest to MDARC members, and provided space is available.

President - Larry Bradley, KK6QPE
Vice President - Ed Morales, KJ6KYT
Secretary - Dick Fletcher, AF9RF
Treasurer - Cathi Walton, K2CJW
Technical Committee Chair
Jim Siemons, W6LK

Directors At Large
Trevor Hall, WA6JAU Terry Buxton, KK6KGX
Janice Fujii, KG6VTD John Primus, AF6RJ

Emergency Coordinator - Ron Bunch, W4FEK

Membership Chair - Tom Deeble, KA6SIP
mdarcmembership@mdarc.org

PACIFICON 2018

Chair: Misa Siemons, KJ6BUE
Registration: Tom Deeble, KA6SIP & Debbie Deeble
Treasurer: Jim Siemons, W6LK
Secretary: Pete Harris, KE6ZIW

Annual Auction - Jim Siemons, W6LK
Communications Van - Lauren Styles, WA6CIE
Digital Media - Mike Patterson, N6JGA
Education & Training - John Primus, AF6RJ
Field Day - Larry Loomer, KI6LNB
Good & Welfare Coordinator - Diana Sage, KA6TZU
Holiday Party - Misa Siemons, KJ6BUE
License Testing - Larry Loomer, KI6LNB
Outreach Coordinator - Jim Siemons, W6LK
Public Service - Klaus Berkner, K6KHB
Refreshments: Elizabeth Styles, KG6HLV
Repeater Trustee W6CX - Jay Caldis, KT6Y
Trustee W6LGW - Dick Brown, KT6X

***The Carrier* Newsletter**

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Celebration of *Life*

Remembering Bill, K1LED



You are invited to attend a BBQ in Bill Swindell's memory on Sunday June 10th 2018 at 1 pm. Larkey Park, 2771 Buena Vista Ave, Walnut Creek.

Please bring your stories and memories of Bill to share.

We will be having a traditional "Walnut Creek Model Railway Society" picnic which will include hamburgers, hot dogs, soda and assorted other dishes.

*RSVP: Susan Swindell -
Swindell@value.net or
925-372-6996.*



President's Message



MDARC Family,

Do you read QST Magazine published by ARRL? I hope that you do, and I enjoy reading it each month. To be honest, I don't read every article or report because some are beyond my current level of understanding or skill and some pertain to things of which I have no interest. For example, I am not "in to" repairing classic radio gear, but certainly enjoy reading about the history of classic radio equipment. However, I realize that articles that may not be of interest to me now, may do so in the future. It is for this reason that I really like having QST issues available online so I can go back and find that article of interest.

But I did not have to check the QST archives to find two articles that I thought worth mentioning. The first article was in the April 2018 issue called "An Ultra-Simple 2-Meter Antenna" by John Portune, W6NBC, and as I read it, I thought "I can make this." Then I got thinking: why doesn't our club have a regular class to do these sorts of projects? With over 400 members we certainly have enough people with the knowledge and skill who could volunteer some time to do this. And not just easy-to-do projects like ones that involve learning basic skills like soldering, de-soldering, and component identification and selection, but more advanced projects that create opportunities to learn new things about amateur radio. So, we two things: people to step up to the plate to offer their time and a regular place to meet. Are you available? Do you know of a location to hold these classes? Then let me know.

The second article was in the May 2018 QST issue called "A Value-Added Technician License" in which the ARRL has proposed upgrading the Technician to includes some additional HF opportunities. I am not going to discuss the article or comment of whether I think this is a good idea or not because quite frankly, I have mixed emotions about the proposal.

But what I do want to comment on is one of the reasonings behind the proposal. The article begins by stating that.....

"The expressed hope both of the Committee [Entry Level License Committee] and ARRL Board is that this step might jump-start interest in ham radio—even among current Technician licensees—and rectify the sagging overall new growth of the US Amateur Radio population—about 1% or lower over the past several years."

And elsewhere as stated in the Petition present by the ARRL to the FCC-- *Notice of Proposed Rule Making (NPRM)*:

"It will attract more newcomers to Amateur Radio, it will result in increased retention of licensees who hold Technician-class licensees, and it will provide an improved incentive for entry-level licensees to increase technical self-training and pursue higher license class achievement and development of communication skills."

I certainly agree that the growth rate for our hobby is quite low and the total number of ham operators is in danger of decreasing, but whether the ARRL's proposal will be enough to forestall this decline is still an open question. I hope this will be the case, but I have my concerns about its effectiveness if we do not also provide regular learning and hands-on opportunities. Not every person holding a ham-radio license is what I would call a self-starter but would welcome meeting with other hams to work on projects under the tutelage of knowledgeable hams. Our hobby espouses the availability of Elmers to mentor others, but often this is haphazard and limited one-on-one, but we should expand this concept to include one-on-many...or at least a small group. Give it some thought and let me know your thoughts how we can move forward with this.

If you missed helping at the **Berkeley Hill Road Race** on May 12, then consider helping at the **Walnut Festival Twilight Parade** in September. Let Pete Harris, KE6ZIW know of your interest.

"I have no special talent. I am only passionately curious." Albert Einstein (1879-1955)

73, Larry Bradley KK6QPE



My Fellow Hams,

Field Day 2018 is fast approaching, and the MDARC Field Day Committee is looking for assistance with:

Setup and teardown

Communicating with the public visitors and others that come to visit our site

Planning the food service and presentation

Making contacts on the air as band captains and operators

Safety to assure that we maintain a safe and secure site

Antennas to support the hams that are operating

Computer logging and networking



NEEDS:

We need hams familiar with CW, HF, digital modes and Satellite contacting to maximize our point accumulation.

We need alternate sources of electricity.

We need hams to present educational presentations to the visitors.

We need to set up a Getting on the Air (GOTA) station for visitors to talk on the air.

We need to encourage youth participation in our activities.

We need to invite a served agency representative and an elected government official to our site.

We need to send out an invitation on social media.

We need to assign a Safety Officer to keep us safe at the site.

We need to staff a public information table to answer visitors' questions.

Thank you for considering to join us in the Field Day 2018 activities.

73,

Larry Loomer, KI6LNB
Field Day Chair

49th ANNIVERSARY CAMPOUT PARTY 2018

PRESENTED BY THE Knights of the Megahertz & Mount Diablo Amateur Radio Club

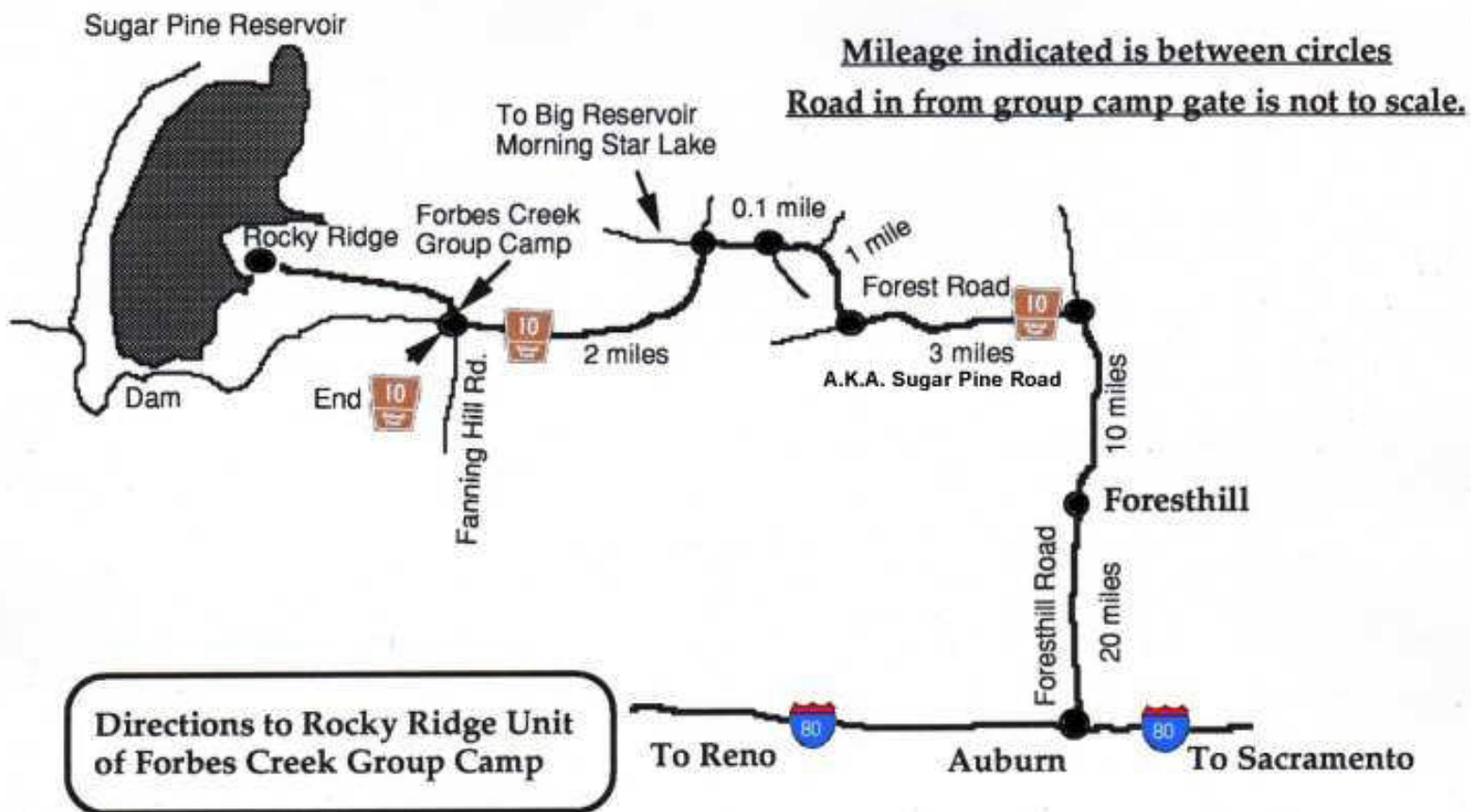
" A 2018 Camping Adventure"

June 1st, 2nd & 3rd Annual Campout with Knights of the Megahertz

This campout will take place starting on Friday, June 1nd and ends on Sunday, June 3rd at the Sugar Pine Dam Recreation Area in the Forbes Creek section at the Rocky Ridge group site. It is one of the most beautiful spots in Placer County. We are limited to 50 people at this site so get your reservations in early.
Cost is \$40 per family.

For more information please visit : <http://www.knightsmhz.org/camp2018.htm>

Or contact Dave, WA6UHA, at: youha@comcast.net



Northern Nevada Radio Swap Meet

Saturday June 2, 2018



7:00 am until ??? Minden, Nevada

13th Annual Radio, Electronics and Hi-Fi Swap Meet

VINTAGE EQUIPMENT, Modern gear, Drake, Collins, Johnson, Hi-Fi and all electronics.

Agenda: Swap - Buy - Sell - Trade- Have fun

No fee event, free for the hobbyist.

Swap meet is on a 6-acre ranch. Parking, trailers and RV easy access.

BRING LOTS OF STUFF BY THE TRUCK LOAD “

WHERE: (N7RCA) in Minden, NV.

(20 miles from S. Lake Tahoe) 15 miles south of Carson City NV.

WHEN: June 2, 2018 7:00 a.m.

What to bring:

*Yourself, truckloads of equipment if you have it, family, friends etc.

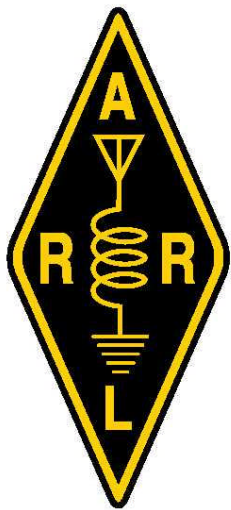
*Bring your own drinks and food etc., none provided.

*Chairs and a tables for swap.

You can drop off large loads the night before. RV's welcome on the ranch, before and after the swap meet. lots of parking.

Map and contact information at www.N7RCA.info

Weather Outlook: Temps in the day time can range from mid 60's to mid 80's. Nights in the 60's to low 40's. Bring a hat and sunscreen, the elevation is 5000 feet of clear blue open skies.



Nevada State Amateur Radio Convention

NVCON

RENO-TAHOE 2018

July 20 - 22, 2018

Boomtown Casino Hotel • Reno, NV

● **Friday Amateur Radio Academy**

DX, Contesting, HF Digital, VHF/UHF Digital

● **Table Talks**

Round table discussions with Subject Experts

● **Amateur Radio Forums**

Presentations on Amateur Radio Related Topics

● **Exhibitors & Vendors**

Popular Amateur Radio Vendors and Exhibitors

● **Saturday Ham Swap**

Sell, Buy, Trade starting at 6am

● **Radio Exams**

Tech, General & Extra Exams

● **Raffle Prizes**

Amateur Radio Raffle Prizes

● **and more**

visit <http://nvcon.org> for more info

<http://nvcon.org>

MDARC Club Meeting Circa 1970



**And not a single cell phone or handheld radio in sight !
Who do you recognize?**

Photo courtesy Jay Caldis, KT6Y, who also appears in it.



HAM RADIO OUTLET

14 STORE BUYING POWER!

ICOM



IC-7600 | All Mode Transceiver

- 100W HF/6m Transceiver, gen cov. receiver • Dual DSP 32 bit • Three roofing filters- 3, 6, 15kHz • 5.8 in WQVGA TFT display • Hi-res real time spectrum scope



IC-7200 | HF Transceiver

- 160-10M • 100W • Simple & tough with IF DSP • AGC Loop Management • Digital IF Filter • Digital Twin PBT • Digital Noise Reduction • Digital Noise Blanker • USB Port for PC Control



IC-7100 | All Mode Transceiver

- HF/50/144/430/440 MHz Multi-band, Multi-mode, IF DSP • D-STAR DV Mode (Digital Voice + Data) • Intuitive Touch Screen Interface • Built-in RTTY Functions



ID-5100A | VHF/UHF Dual Band Digital Transceiver

- Analog FM/D-Star DV Mode • SD Card Slot for Voice & Data Storage • 50W Output on VHF/UHF Bands • Integrated GPS Receiver • AM Airband Dualwatch • FM Analog/DV Repeater List Function

ID-51A | VHF/UHF Dual Band Transceiver

- 5/2.5/1.0/0.5/0.1W Output • RX: 0.52-1.71, 88-174, 380-479 MHz** • AM/FM/FM-N/WFM/DV • 1304 Alphanumeric Memory Chls • Integrated GPS • D-STAR Repeater Directory • IPX7 Submersible



KENWOOD



TS-590SG | HF/50MHz Transceiver

- Equipped with 500 Hz/2.7 kHz roofing filter as standard • ALC derived from TS-990S eliminating spike issues • Antenna output function (shared with DRV connector) • CW - morse code decoder function



TM-D710G | 2M/440 Dualband

- V-V/V+U/U+U operation • Built-in GPS • Built-in TNC for APRS & DX-Cluster operation • 50W 2M & UHF • 1,000 memories • Dual receive • Green or amber backlight colors • Latest APRS firmware w/new features • Sky Command II remote functions



TM-V71A | 2M/440 DualBand

- High RF output (50W) • Multiple Scan • Dual receive on same band (VxV, UxU) • Echolink® memory (auto dialer) • Echolink® Sysop mode for node terminal ops • Invertible front panel • Choice of green/amber for LCD panel • 104 code digital code squelch



TM-281A | 2 Mtr Mobile

- 65 Watt • 200 Memories • CTCSS/DCS • Mil-Std specs • Hi-quality audio

TH-F6A | 2M/220/440

- Dual channel receive • .1 - 1300 MHz (cell blocked) RX • FM, AM, SSB • 5W 2M/220/440 TX, FM • 435 Memories • Li-Ion Battery



YAESU
The radio



FT-991 | HF/50MHz/2M/440 Transceiver

- 160 M-440MHz - SSB/CW/FM/C4FM Digital/AM/RTTY/PSK • 100 W (2M/440: 50 Watts) • 3.5" TFT full-color touch panel operation • High speed spectrum scope • Roofing filters: 3kHz & 15kHz • 32-bit high speed floating point IF DSP



FTDX1200 | 100W HF + 6M Transceiver

- Triple Conversion Receiver With 32-bit Floating Point DSP • 40 MHz 1st IF with selectable 3 kHz, 6kHz & 15 kHz Roofing Filters • Optional FFT-1 Supports AF-FFT Scope, RTTY/PSK31 Encode/Decode, CW Decode/Auto Zero-In • Full Color 4.3" TFT Display



FT-450D | A100W HF + 6M Transceiver

- 100W HF/6M • Auto tuner built-in • DSP built-in • 500 memories • DNR, IF Notch, IF Shift



FTM-400DR | 2M/440 Mobile

- Color display-green, blue, orange, purple, gray • GPS/APRS • Packet 1200/9600 bd ready • Spectrum scope • Bluetooth • MicroSD slot • 500 memory per band

FT-60R | 2M/440 5W HT

- Wide receiver coverage • AM air band receive • 1000 memory channels w/alpha labels • Huge LCD display • Rugged die-cast, water resistant case • NOAA severe weather alert with alert scan



5 Ways to Shop!

- RETAIL LOCATIONS - Store hours 10:00AM - 5:30PM - Closed Sunday
- PHONE - Toll-free phone hours 9:30AM - 5:30PM
- FAX - All store locations
- ONLINE - WWW.HAMRADIO.COM
- MAIL - All store locations

ANAHEIM, CA
(800) 854-6046

OAKLAND, CA
(877) 892-1745

BURBANK, CA
(877) 892-1748

SAN DIEGO, CA
(877) 520-9623

NEW CASTLE, DE
(800) 644-4476

PORTLAND, OR
(800) 765-4267

DENVER, CO
(800) 444-9476

PHOENIX, AZ
(800) 559-7388

ATLANTA, GA
(800) 444-7927

WOODBIDGE, VA
(800) 444-4799

SALEM, NH
(800) 444-0047

PLANO, TX
(877) 455-8750

ONLINE STORE
WWW.HAMRADIO.COM

New Store!

Contact HRO for promotion details. Toll-free including Hawaii, Alaska and Canada. Call will be routed to the nearest store. All HRO 800-lines can assist you. If the first line you call is busy, you may call another. AZ, CA, CO, GA, VA residents add sales tax. Prices, specifications and descriptions subject to change without notice.



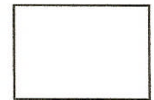
The Carrier

Newsletter of the Mt. Diablo Amateur Radio Club

P.O. Box 23222

Pleasant Hill, CA 94523

www.mdarc.org



NEXT MONTH



FIRST CLASS

<https://www.facebook.com/mdarc.org>

W6CX Nets

M-F 5:42 am Morning Muster 147.060+ 224.781- 441.325+

M-F 6:10am Commuter Net 147.060+ 224.781- 441.325+

Monday 8:00 pm SATERN Net 147.060+

Tuesday 7:30 pm Fat City 10 meter USB/CW Net 28.420 MHz

Tuesday 8:00pm Digital Practice Net 147.060+ 224.781- 441.325+

Wednesday 7:00 pm SKYWARN Net 147.060+

Thursday 7:30 pm MDARC Club Net 147.060+

Thursday 8:00 pm Amateur Television Net 147.060+

FM 147.060 MHz + / PL 100Hz -

224.780 MHz - / PL 77Hz 441.325 MHz + / PL 100Hz

EchoLink: W6CX-R /133896, IRLP: 3057

<https://www.broadcastify.com/listen/feed/25334>

D-STAR 145.000 offset plus 2.5 MHz

<https://w6cx.dstargateway.org/>

Digital ATV Output 1244.500 Digital ATV Input 1292.500

Analog ATV Inputs: 1270.000 FM (PL 192.8) 915.0 AM

ATV Internet Stream: <http://w6cxatv.mdarc.org/>

Contra Costa County Emergency Communications Nets

Every Thursday

<http://www.coco-races.org/meetings/nets/>

6:35 pm HF Countywide 3.893 MHz LSB

6:45 pm West County 145.110-- (82.5 PL)

7:00 pm Central County 145.680 Simplex

7:00 pm East County 146.535 Simplex

7:00 pm South County 147.480 Simplex

7:20 pm Countywide 145.490-- (107.2 PL)

or 147.735-- (107.2 PL)

or 145.410-- (107.2 PL)

Concord Auxiliary Radio Emergency Service (CARES)

Wednesday 8:00pm 147.405 Simplex

May and June 2018 Club Calendar

Friday May 18, 2018	7:30pm	MDARC General Meeting- - Our Savior's Lutheran Church 1035 Carol Lane, Lafayette
Saturday June 2, 2018	8:00am	MDARC Technical Committee Meeting - Ygnacio Valley Library 2661 Oak Grove Road, Walnut Creek
Monday June 4, 2018	7:00pm	MDARC Board Meeting Black Bear Restaurant, 700 Bancroft Avenue, Walnut Creek
Friday June 15, 2018	7:30pm	MDARC General Meeting- - Our Savior's Lutheran Church 1035 Carol Lane, Lafayette